

## BOOK REVIEWS

*Nature and Its Applications.* By JESSIE CROFT ELLIS. (F. W. Faxon Company: 1949) 7 x 10½ in., xii + 861 pages, \$17.00.

This large volume will serve as a valuable tool for ornithologists who must search through literature for references to particular species of birds. In brief, it is an index to illustrations (*i.e.*, reproductions of photographs, drawings, paintings, etc.) of various nature subjects ranging from Aardvarks to *Zygadenus elegans*. An attempt is made to include "not only subjects of nature in their natural setting and form but also nature as used in art, sculpture, advertising, paintings, toys, and every form of decorative design work." Persons using this index will find that it is possible to obtain much written information about the subjects included since illustrations are accompanied occasionally by explanatory legends and frequently by articles relating to them.

Over 125 books and periodicals have been indexed. These include *Audubon Magazine* (also its predecessor, *Bird-Lore*) and *Nature Magazine* which have regularly published extensive information on birds, as well as the following which have on numerous occasions carried information useful to persons interested in birds: *American Forests*, *Field and Stream*, *National Geographic Magazine*, and *Natural History*.

The present work is a new edition of "Nature Index" by the same author and is limited to 1,000 copies. Both the author and publishers are to be commended for having performed this great service to workers in the field of natural history.

OLIN SEWALL PETTINGILL, JR..

*The Birds of Concord.* By LUDLOW GRISCOM. (Harvard University Press: 1949) 340 pages 16 illus., 1 map. \$5.00.

In this book, the most expert field ornithologist of our generation compares his notes with those of William Brewster, the most expert of the preceding generation. The result is a treasure of data concerning changes in the avifauna of the region around Concord, Mass. The introduction describes the Concord area, summarizes the ornithological work and explains the study methods. Brewster in 1868 began recording observations of birds at Concord in voluminous diaries and notebooks. Griscom has abstracted these and added his own recent notes. Part I of the book, titled Population Trends, describes the basic ecological factors of the region and of the birds. Then follows a summary of fluctuations in animals and a description of the increases and decreases in populations. Part II describes the present bird life and gives in a systematic list the abstracted notes of Brewster and others.

For the general ornithologist by far the most important sections deal with the changes in abundance of a number of species (p. 97-132). For example, the Indigo Bunting was common from 1830-1879, declined from 1880-1930, and subsequently increased. The Nighthawk not only fluctuated in abundance but also changed from nesting on the ground to nesting on the roofs. The spectacular results of protection of Wood Ducks and Egrets are clearly shown by the records for 100 years. Perhaps the most significant parts are the discussion of Brewster's principle of population overflow and the estimates of populations at Hurd's Pond, Wayland.

While these histories of populations are fascinating, the critical ornithologist will be concerned at the superficiality of the discussion of results. Terms such as Gaussian curve, periodicity, capacity, etc. are loosely used. Furthermore, the author, who is also an expert botanist, could have given a more specific description of the vegetation, citing the numbers and kinds of plants. The discussion of cycles (p. 123) shows an amazing lack of understanding of cyclic phenomena. The words density (birds per unit) and population (total birds) are frequently confused. Lastly, the illustrations are excellent photographs (none by the author) but do not